

# SMW and the Workflow Puzzle



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# Yaron Koren

- New York City-based software developer
- MediaWiki and SMW developer and consultant since 2007
- My extensions: Semantic Forms + a bunch more
- Run the MediaWiki consulting company WikiWorks
- Help run the wiki farm Referata

See Joel Natividad's talk at SMWCon Fall 2010 in Amsterdam, "Workflow integration - integrating with workflow/BPM engines"

– it's a good one!

# What is workflow?

Yaron's definition:

A series of rules of the form:

**When (*event*) happens, do (*action*)**

## Possible events:

- A date/time is reached
- A task is assigned / started / completed
- A document is created / reviewed / rejected / published
- A purchase is made
- A stock reaches a certain price
- ...

## Possible actions:

- Send an email / message
- Change a task / document's status
- Re-assign a task / document
- Hide / display a page
- Send a physical object
- Make a purchase
- ...

For wikis and other CMS's, these actions and events can be both:

- *real-world* and *internal*
- *human* and *automated*

These can occur in any combination.

# Pieces of the puzzle

Which of these are currently possible with Semantic MediaWiki?

# Evaluation WikiFlow extension

Attempts to create an entire framework for reviewing and certifying documents, based on SMW.

This extension defines: 1 namespace, 6 special pages, 1 new tab, 5 user rights, 6 parser functions, 12 "magic words", 2 SMW special properties, 3 Semantic Forms input types.



# Evaluation WikiFlow

Extension created, then abandoned (?), in 2009.

No longer works with latest MediaWiki.

A good case study of the difficulty of creating a full-fledged solution within SMW.



Trying to support all possible user actions within the code is a trip down the rabbit hole!

Much easier to create a generic set of tools, that can be arranged together within each wiki.

# Semantic Tasks extension

When a date/time is reached, send email(s).

# Semantic NotifyMe extension

When the value of a query changes, send email(s).

# Semantic Notifications extension (part of SMW+)

When the value of a query changes, send  
email(s).

# Approved Revs extension

Mark a certain revision of a page as the "approved" one, to be displayed by default.

- can be used for document-specific workflow: approval, hiding and showing of pages

# Semantic Forms extension

New `#autoedit` function, in SF 2.2, lets you change field value(s) in templates within the pages directly via the URL.

- This is an important new feature because it allows for easily automating specific data modifications – reduces the need for scripts or bots.

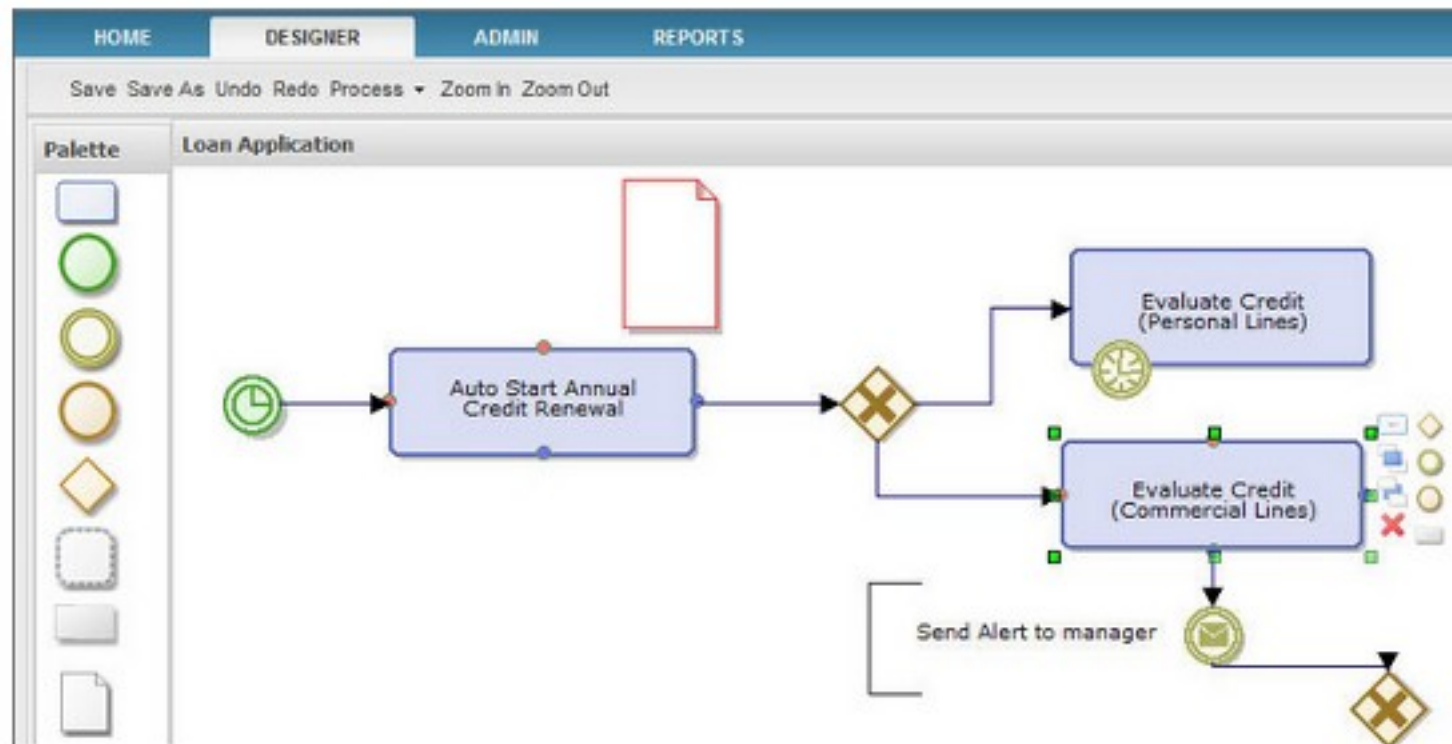
How can all these “tools” be combined into a single, usable system?

Possible answer: using existing workflow software.

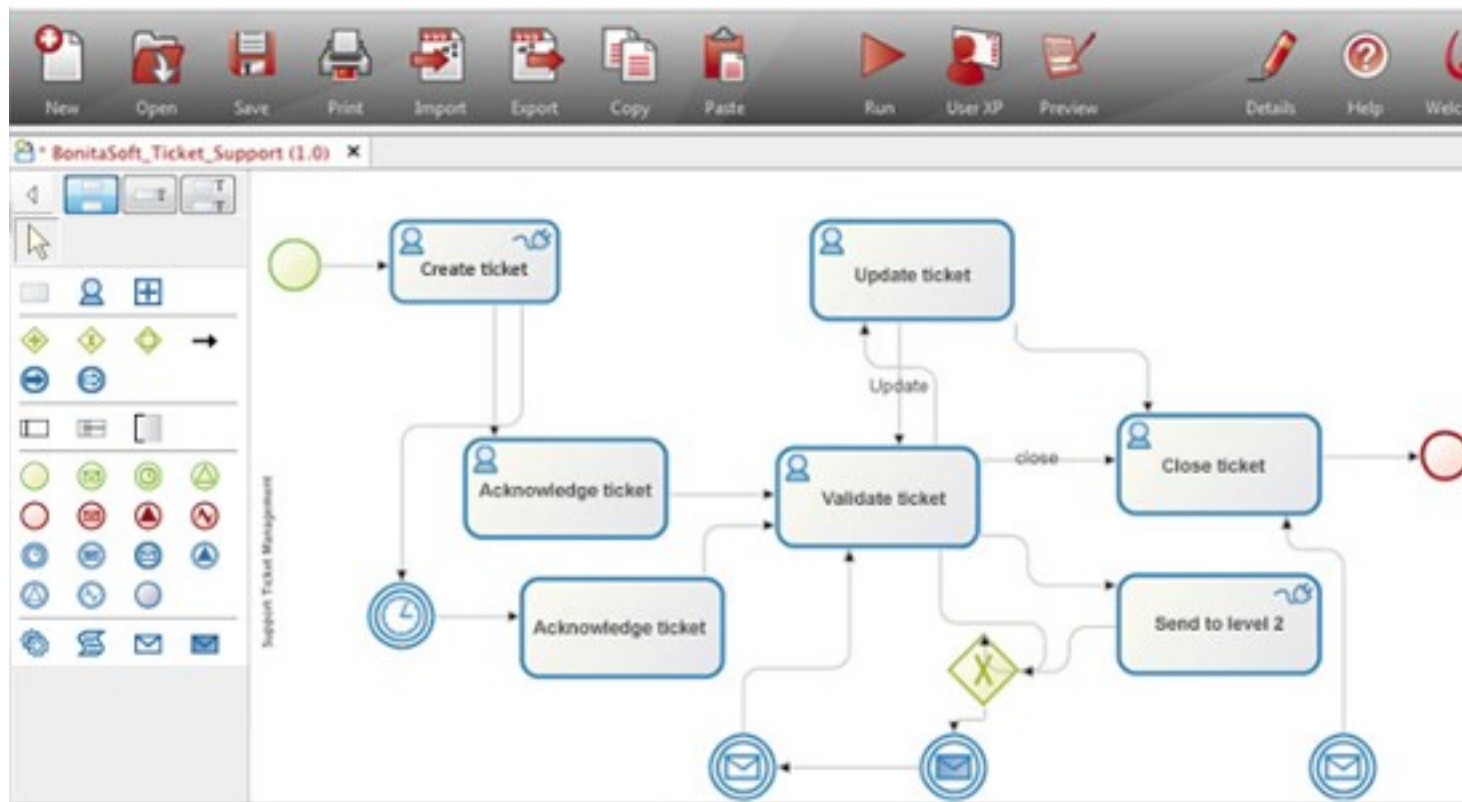
There are many such applications that can model and run an entire workflow, including interacting with a wiki (via URLs).



# “ProcessMaker” screenshot:



# “Bonita” screenshot:



Possible improvement for Semantic Tasks, Semantic Notifications, Semantic NotifyMe:

Allow for specifying a URL to hit, instead of just an email to be sent out, when the relevant event occurs.

- that way, automated systems (including workflow applications) can be notified about the event.